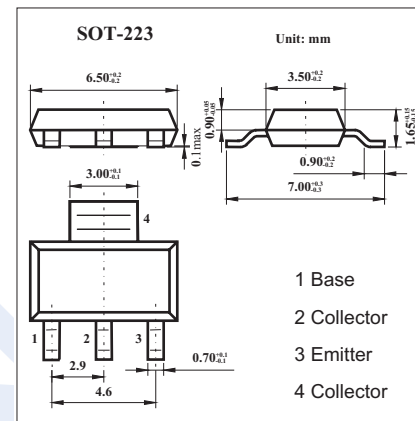


Surface Mount NPN Silicon Power Darlington Transistor KZT122 (CZT122)

■ Features

- High current (max. 5A).
- Low voltage (max. 100V).



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	100	V
Collector-emitter voltage	V _{CEO}	100	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _C	5	A
	I _{CP}	8	A
Base current	I _B	120	mA
power dissipation	P _D	2	W
Thermal Resistance Junction-to-Ambient	R _{θJA}	62.5	°C/W
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-65 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector to emitter breakdown voltage	V _{CEO}	I _C =30mA	100			V
Collector cutoff current	I _{CEO}	V _{CE} =50V			500	μA
Collector cutoff current	I _{CB0}	V _{CB} = 100 V			200	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 5.0 V			2.0	mA
DC current gain	h _{FE}	I _C = 500 mA; V _{CE} = 3.0 V	1000			
		I _C = 3A; V _{CE} = 3.0V	1000			
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 3.0A; I _B = 12mA			2.0	V
Base to emitter saturation voltage	V _{BE(sat)}	I _C = 5.0A; I _B = 20mA			4.0	V
Output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1.0MHz			200	pF
Transition frequency	f _T	I _C = 3A; V _{CE} = 4V; f = 1.0 MHz	4.0			MHz